LineUp With Math™ Alignment
Performance Standards
Mathematics

ALGEBRA
Students will explore functions and solve simple equations. Students will simplify and operate with radical, polynomial, and rational expressions.

MC1A1. Students will explore and interpret the characteristics of functions, using graphs, tables, and simple algebraic techniques.

Performance Standards	*LineUp With Math™* Activities
g. Explore rates of change, comparing constant rates of change (i.e., slope) versus variable rates of change. Compare rates of change of linear, quadratic, square root, and other function families.	--Identify and resolve distance, rate, time conflicts in air traffic control problems by varying plane speeds or changing plane routes.

PROCESS STANDARDS
The following process standards are essential to mastering each of the mathematics content standards. They emphasize critical dimensions of the mathematical proficiency that all students need.

MC1P1. Students will solve problems (using appropriate technology).

Performance Standards	*LineUp With Math™* Activities
b. Solve problems that arise in mathematics and in other contexts.	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.
c. Apply and adapt a variety of appropriate strategies to solve problems.	--Choose and apply a variety of strategies to optimize the solution of air traffic control conflicts.

MC1P3. Students will communicate mathematically.

Performance Standards	*LineUp With Math™* Activities
b. Communicate their mathematical thinking coherently and clearly to peers, teachers, and others.	--Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.

MC1P4. Students will make connections among mathematical ideas and to other disciplines.

Performance Standards	*LineUp With Math™* Activities
c. Recognize and apply mathematics in contexts outside of mathematics.	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.

MC1P5. Students will represent mathematics in multiple ways.

Performance Standards	*LineUp With Math™* Activities
a. Create and use representations to organize, record,	--Use an interactive simulator plus calculation

and communicate mathematical ideas.	worksheets to model and resolve air traffic control conflicts.
b. Select, apply, and translate among mathematical representations to solve problems.	--Choose and apply a variety of strategies to optimize the solution of air traffic control conflicts.
c. Use representations to model and interpret physical, social, and mathematical phenomena.	--Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts.